



**State of Louisiana
Coastal Protection and Restoration Authority
Operations Division**

2014 Annual Inspection Report

Barataria Bay Waterway East Shoreline Protection

State Project Number BA-26
Priority Project List 6

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Jefferson Parish

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I. Introduction

The Barataria Bay Waterway East Bank Protection Project (BA-26) encompasses 2,790 acres (880 ha) brackish marsh and open water habitat on the east bank of the Barataria Bay Waterway located in the Barataria Basin, Jefferson Parish, Louisiana approximately 1.5 miles south of Lafitte. The Project is bounded by the Barataria Bay Waterway to the west, Barataria Bay Shoreline to the east and Bayou Dupont to the north (Appendix A).

II. Project Description and History

The Barataria Bay Waterway East Bank Protection Project includes approximately 17,100 linear feet (3.2 miles) of foreshore rock dike bank line protection and an earthen hydrologic barrier created from dredged material from the Barataria Bay Waterway Channel placed to the East along the rock dike within the project area. The rock structure was constructed with a synthetic clay core to reduce its overall weight. The clay material was encapsulated in geotextile bags and placed along the centerline of the dike. The dike is intended to re-establish the eastern bank of the Barataria Bay Waterway and to protect the adjacent marsh from unnatural water exchange and subsequent erosion which is exacerbated by wakes from vessel traffic on the waterway.

Project construction began on February 19, 2001, and was completed on May 21, 2001. Project life is estimated to be 20 years. Annual project inspections are planned.

In December 2005, a contract to raise these structures was awarded and resulted in the placement of 17,417 tons of rock riprap on the settled sections of the structure. The work was completed on January 24, 2006.

III. Inspection Purpose and Procedures

The purpose of the annual inspection of the Barataria Bay Waterway East Bank Protection Project (BA-26) is to evaluate the constructed project features to identify any deficiencies and prepare a report detailing the condition of project features and recommended corrective actions needed. Should it be determined that corrective actions are needed, CPRA shall provide, in the report, a detailed cost estimate for engineering, design, supervision, inspection, and construction contingencies, and an assessment of the urgency of such repairs (O&M Plan August 9, 2002). The annual inspection report also contains a summary of maintenance projects and an estimated projected budget for the upcoming three (3) years for operation, maintenance and rehabilitation. The three (3) year projected operation and maintenance budget is shown in Appendix C. A summary of past operation and maintenance projects completed since completion of the project are outlined in Section II.

An inspection of the Barataria Bay Waterway East Bank Protection Project (BA-26) was held on July 2, 2014, by Barry Richard and Luke Prendergast of CPRA, along with Quin

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Kinler and Doug Baker of NRCS. Photographs of that inspection are included in Appendix B of this report.

IV. Inspection Results

Rock Riprap

The overall condition of the rock shoreline protection structure was good (Photo #1). Some settlement was observed south of the marsh creation portion of the South Shore of the Pen Project (BA-41, Photo #2). A small gap in the rock structure was noted at approximate coordinates N29.61380°, W 090.07905°. This gap is probably the result of vandalism and should be monitored (Photo #3). Some accretion and vegetation was observed behind the rock structure at the north end of the project (Photo #4).

V. Conclusions

The Barataria Bay Waterway East Protection Project (BA-26) is performing as intended. The rock dike is protecting the existing marsh as designed. Some settlement has been observed and will continue to be monitored; however, the structure should perform adequately through the next programmed maintenance lift.

VI. Recommendations

Immediate Repairs

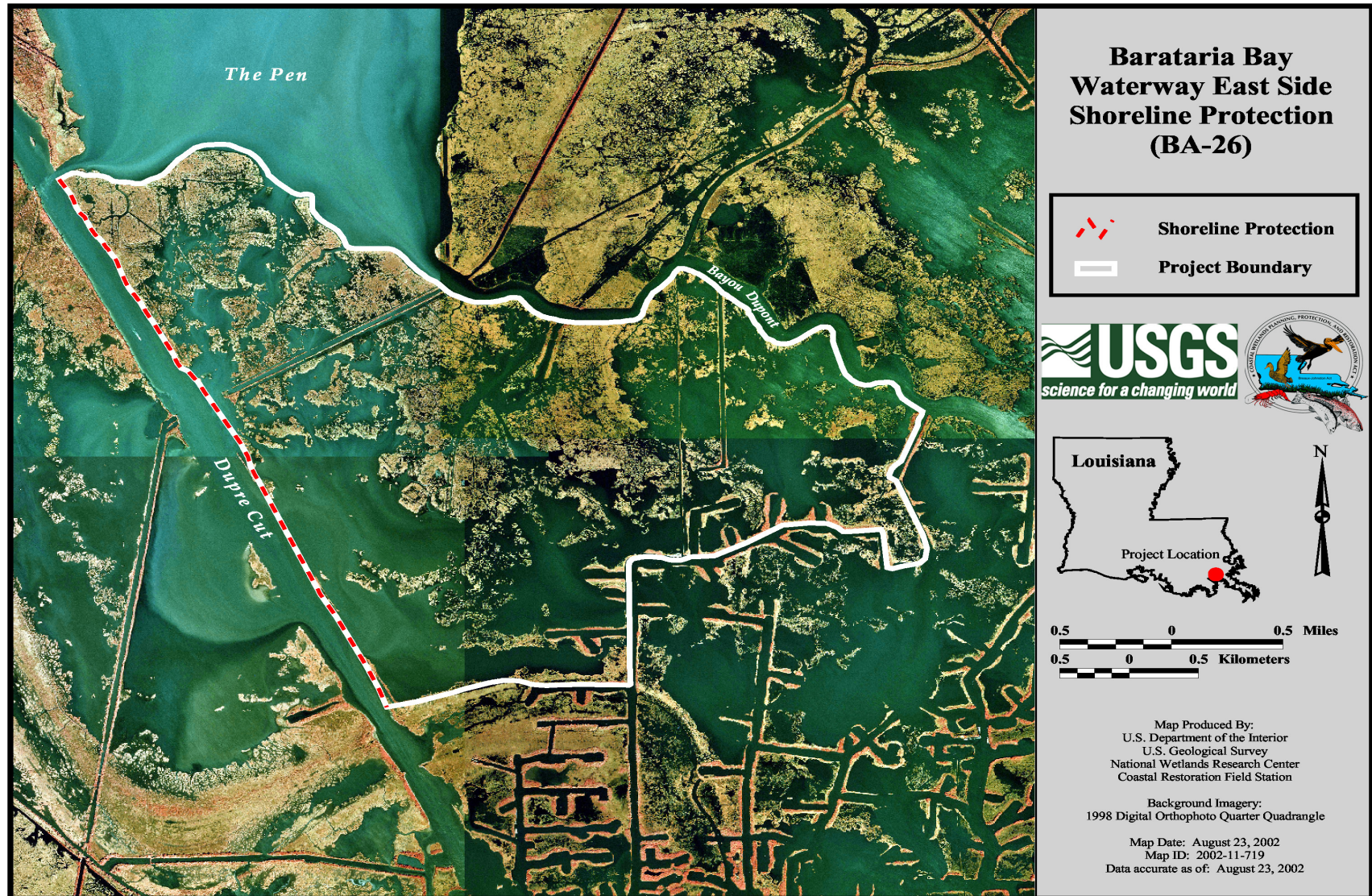
- No immediate repairs are necessary at this time.

Programmed Maintenance

- Continue to monitor the settlement of the rock structure.

Appendix A

Project Features Map



Appendix B

Photographs



Photo #1 – Shoreline Protection



Photo # 2 – Slight Settlement Noted



Photo # 3 – Gap in Structure



Photo # 4 – Accretion & Vegetation

Appendix C

Three Year Budget Projection

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Appendix D

Field Inspection Form

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MAINTENANCE INSPECTION REPORT CHECK SHEET					
Project No. / Name: BA-26 Barataria Waterway (East) Shoreline Protection				Date of Inspection: 7/2/2014 Time: 9:30 am	
Structure No. <u>n/a</u>				Inspector(s): <u>Richard, Prendergast, Kinler, Baker</u>	
Structure Description: <u>Foreshore Rock Dike</u>				Water Level Inside: <u>N/A</u> Outside: <u>0.90'</u>	
Type of Inspection: <u>Annual</u>				Weather Conditions: <u>Mostly sunny, light wind</u>	
Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks
Foreshore Rock Dike	Good	small gap	None	1, 2, 3, 4	small gap at approx. coordinates N29.61380, W090.07904
					some settlement, no action, continue observing
Settlement Plates	Good	None	None		
Signage /Supports	Good	None	None		